Notice of Intent to Sue May 20, 2013 Page 2 of 4

The attorneys representing the party in this notice:

Michael R. Lozeau Richard T. Drury Lozeau Drury LLP 410 12th Street, Suite 250 Oakland, CA 94607 Tel: (510) 836-4200

Under Section 301 of the CWA, 33 U.S.C. § 1311, a person may not discharge pollutants into waters of the United States from a point source unless the discharge is permitted pursuant to a legally-valid permit. Under Section 404 of the CWA, 33 U.S.C. § 1344, a person may discharge dredge or fill material to waters of the United States only if authorized by a Section 404 permit. Section 404 permits are issued and administered by the U.S. Army Corps of Engineers. Any deposit of dredged or fill material into waters of the United States in the absence of coverage under a Section 404 permit is a violation of the CWA. Discharge of pollutant is defined as any addition of any pollutant to navigable waters from any source. 33 U.S.C. § 1362(12). Point sources are defined as any discernible, confined and discrete conveyance from which pollutants are discharged, including bulldozers, dump trucks, backhoes, and other heavy equipment. 33 U.S.C. § 1362(14); Borden Ranch P'ship v. United States Army Corps of Eng'rs, 261 F.3d 810 (9th Cir. 2001). Pollutant is defined to include dredged spoil, solid waste, biological materials, rock, sand, and agricultural waste. 33 U.S.C. § 1362(6).

The aerial photos plainly demonstrate that the landowners, David Rendon and Juan Sierra Rendon, or their agents, filled in vegetated channels, washes and wetlands at the site beginning in and around January 2006. Exhibits 1 - 6. Additional filling of channels is evident from the photos in later 2006 or 2007. Id. An expert review of the historic photos showing these robust water features on the site confirms that the channels are waters of the United States. Comment of Steven Bond (attached as Exhibit 7). Prior to being filled with dirt, water in those channels would flow into downgradient channels and into the Salton Sea. The Salton Sea is a navigable water and a water of the United States.

The mere fact that persons illegally placed fill in waters of the United States does not alter the designation of the site's washes and channels as waters of the United States. If the channels existed as of 1975, and were filled in 2006 to the present day without a permit issued by the Army Corps of Engineers pursuant to Section 404 of the federal Clean Water Act, 33 U.S.C. § 1344, those channels and washes remain waters of the United States to this day. *See Golden Gate Audubon Soc. v. United States Army Corps of Eng'rs*, 717 F.Supp. 1417, 1421-1422 (N.D. Cal. 1988). The illegal fill on the 8201 Cuff Road properties continues to this day. *Ctr. for Biological Diversity v. Marina Point Dev. Assocs.*, 434 F.Supp.2d 789, 798 (C.D. Cal. 2006), vacated on other grounds ("Violations are deemed 'continuing' when the violator (1) illegally dumps fill material in wetlands or other federal waters; and (2) is in a position to remove the pollutants but fails to do so."). Accordingly, the owners' violations of Section 301(a) and the CWA are ongoing and continuous.

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IVSC 2 has entered into arrangements with the landowners to construct a solar project at the site. That project calls for grading of the parcels, including the areas at which waters of the United States have been illegally filled. Because the Project proposes to further fill those waters with graded material and paving, IVSC 2 also will be illegally filling waters of the United States without a Section 404 permit. See Ctr. for Biological Diversity, 434 F. Supp.2d at 798. Should IVSC 2 begin grading activities at the property in the areas of the filled channels, IVSC 2 will be dredging or filling those waters in violation of Section 301 as well.

Each and every day that the illegal fill material remains in place constitutes a violation of the CWA. At a minimum, the landowners must complete full restoration of all damage and environmental harm caused by their unpermitted activity in order to come back into compliance with the CWA. IVSC 2 must refrain from placing any additional fill by grading in the areas of the channels. LIUNA will seek the statutory maximum of \$37,500 per day for each violation, including those violations occurring subsequent to this letter, plus injunctive and remedial relief, costs, attorney and expert witness fees, and such other relief as may be appropriate. To the extent that you believe any of the information in this notice letter is inaccurate, or if you wish to further discuss this letter, LIUNA urges that you or your representatives contact us at your earliest convenience.

LIUNA believes this Notice of Violations and Intent to File Suit sufficiently states grounds for filing suit. LIUNA intends to file a citizen suit under Section 505(a) of the Act against David Rendon, Juan Sierra Rendon, and Imperial Valley Solar Company (IVSC) 2 for the above referenced violations upon the expiration of the 60-day notice period. However, during the 60-day notice period, LIUNA would be willing to discuss effective remedies for the violations noted in this letter. If you wish to pursue such discussions in the absence of litigation, LIUNA suggests that you initiate those discussions within the next 20 days so that they may be completed before the end of the 60-day notice period. LIUNA does not intend to delay the filing of a complaint in federal court if discussions are continuing when that period ends.

Sincerely,

Michael R. Lozeau

Lozeau Drury LLP

Attorneys for Laborers International Union of North

America, Local Union 1184

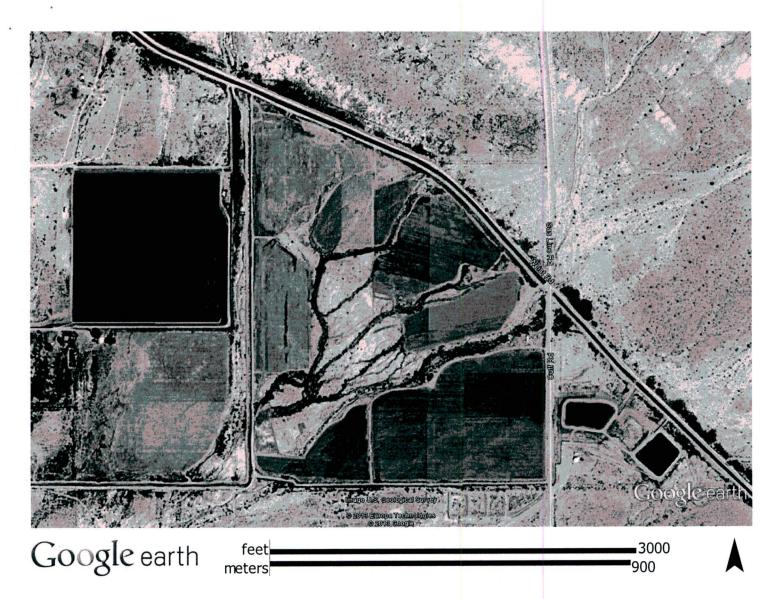


Photo dated June 15, 1996 (Google earth)



T 510.836.4200 F 510.836.4205 410 12th Street, Suite 250 Oakland, Ca 94607

www.lozeaudrury.com michael@lozeaudrury.com

### VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

May 20, 2013

Saul David Rendon Juan Sierra Rendon P.O. Box 1434 Niland, CA 92257

Saul David Rendon Juan Sierra Rendon 8201 Cuff Road Niland, CA 92257 Imperial Valley Solar Company (IVSC) 2, LLC 73-185 Highway 111, Suite D Palm Desert, CA 92260

GKL Corporate/Search, Inc. (C1673485) Registered Agent P.O. Box 1913 Sacramento, CA 95812

## CLEAN WATER ACT SIXTY DAY NOTICE OF INTENT TO SUE LETTER RE: UNAUTHORIZED DISCHARGE OF FILL MATERIALS 8201 Cuff Road, Niland, California

Dear Sirs/Madams,

This is a notice of intent to sue letter pursuant to the citizen suit provision of the Clean Water Act, 33 U.S.C. § 1365, for violations of Section 301 of the Act, 33 U.S.C. § 1311 for discharging fill into waters of the United States located at 8201 Cuff Road, Niland, California on parcels identified as APN 003-240-009-000 and 003-240-029-000 without the requisite dredge and fill permit pursuant to Section 404 of the Act, 33 U.S.C. § 1344. By this letter, the Laborers International Union of North America, Local Union 1184 ("LIUNA") provide notice that the persons and entities named in this letter have violated and remain in violation of the Clean Water Act. If the violations identified herein are not remedied within sixty days, the LIUNA intends to commence an enforcement action against David Rendon, Juan Sierra Rendon, and Imperial Valley Solar Company (IVSC) 2, LLC, seeking civil penalties, injunctive relief, and other appropriate relief including attorneys' fees and costs. If you believe any of the information in this letter is incorrect, please contact the undersigned immediately.

The names, addresses, and phone numbers of the parties providing this notice:

John L. Smith, Manager Laborers International Union of North America, Local Union 1184 1128 E. La Cadena Drive Riverside, CA 92507-8600 Tel: (951) 684-1489

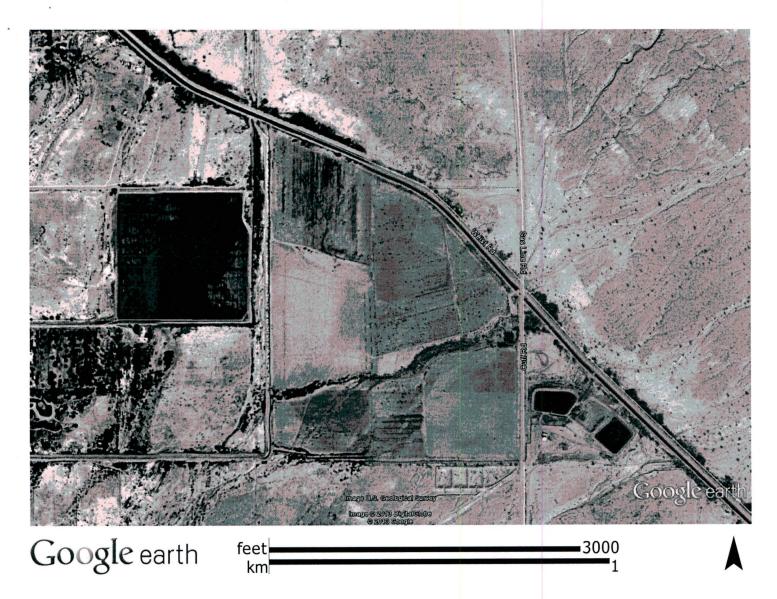
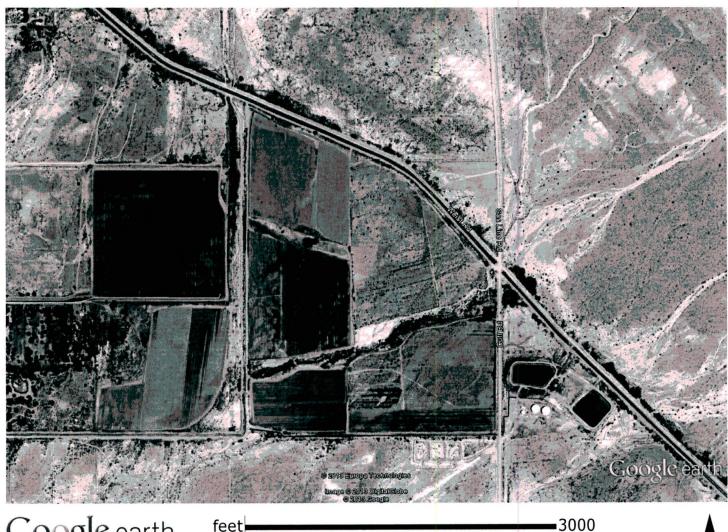


Photo dated February 19, 2004 (Google earth)



Google earth

3000 1 feet km

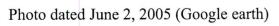




Photo dated January 29, 2006 (Google earth)



Photo dated August 4, 2006 (Google earth)

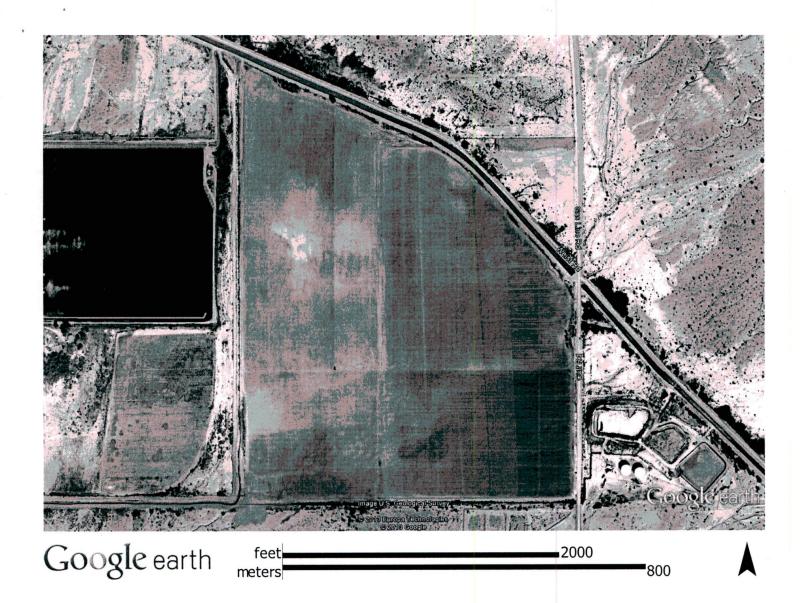
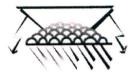


Photo dated February 28, 2008 (Google earth)

### Steven Bond and Associates



Consulting Geologists, Groundwater and Water Quality Experts

P.O. Box 7023, Santa Cruz, CA 95061 v:(831) 458-1662, f:(831) 536-1021 bondassociates@mac.com

17 February 2013

Michael Lozeau Lozeau Drury LLP 410 12th Street, Suite 250 Oakland, California 94607

Subject: Imperial Valley Solar Company 2 Project, Latitude 33.252 North, Longitude 115.497 West, near Niland, California

I examined available satellite and aerial photo images as well as survey maps of the subject project area. The purpose of my examination was to determine the nature of the landforms visible in the photographs dated from 1992 to 2012. From my review I make the following observations:

Satellite images before 2002 show a system of branched tributary watercourses dissecting the project area. Between 2002 and 2005 all but the main watercourse is filled in. This main watercourse is a clearly defined braided stream with well-defined high watermarks. It exhibits multiple small, shallow, braided channels within the bed of the watercourse. The bed of the watercourse is bordered by its banks which define the watermarks of the stream channel. These banks meet the

criteria of an ordinary high water mark defined in 33 CFR § 328.3(e).

The flow path of waters moving from the project area to the Salton Sea flows from the stream channel within the project area into a series of constructed canals which discharge to the Salton Sea. The waters in those channels and the stream channel in the project area are tributary to the Salton Sea.

### **Referenced Documents:**

Google Earth, Historical Satellite Imagery 1992 through 2012, Niland CA area (accessed 16 February 2012)

Bing Maps, (Virtual Earth), Oblique Aerial Imagery, Niland CA area (accessed 16 February 2012)

United States Department of the Interior, Geologic Survey, 7.5-Minute Series (Topographic) Maps: IRIS WASH, CA, 1992, California-Imperial Co.; WISTER, CA, California-Imperial Co.; NILAND, CA 1956, California-Imperial Co.; IRIS, CA, 1992, California-Imperial Co.

Sincerely

Steve Bond PG, CEG, CHG

Principal, Steven Bond and Associates

Attachment: curriculum vitae of Steven Bond

### STEVEN R. BOND

#### **Curriculum Vita**

P. O. Box 7023 Santa Cruz California, USA 95061 v:(831) 458 - 1662 f:(831) 536 - 1021 bondassociates@mac.com

#### **Profile**

Geologist / Engineering Geologist / Hydrogeologist / Aqueous-geochemist /

• More than twenty-five years applied experience in groundwater and engineering geology.

• Twenty years practical experience defining hydrogeologic flow systems in crystalline, fractured rock systems, and porous sedimentary aquifers.

 More than twenty-five years practical experience evaluating natural and issues.

• Twenty years practice of geochemical analysis of humid and semiarid hydrogeologic regimes, including water supply, and contaminant fate and transport.

• More than twenty years experience investigating and evaluating geologic and hydrogeologic hazards related to slope stability, seismic hazards, hazardous materials, mine wastes, and soil and groundwater contamination.

- More than fifteen years experience defining and modeling river flow, flooding analyses, sediment transport systems, and rainfall distribution.
- More than twenty-five years experience evaluating industrial impacts to ground and surface water quality.
- Eleven years regulatory experience implementing California and U. S. water quality laws and regulations.

Professional Licenses	Professional Geologist, California, USA	# 5411
	Certified Engineering Geologist, California, USA	# 1841
	Certified Hydrogeologist, California, USA	# 0238

#### **Professional Experience**

January 1999 to Present

Steven Bond and Associates, Santa Cruz, CA, President, Principal Geologist

Conducted investigations and assessments of geologic hazards, threats to surface water and groundwater quality from various industrial and natural sources, and groundwater supply investigations. Performed litigation support in cases involving potential impacts of geologic hazards, groundwater supply and pollution, surface water pollution, and State water quality policy review. Examples of such activities and projects include the following:

- Engineering Geology: Conducted investigations of geologic hazards, foundation studies, liquefaction potential assessments, fault trace analyses, slope stability assessments and prepared the associated engineering geology investigation reports for development and industrial projects in Monterey, San Mateo, Mendocino, and Santa Cruz Counties. ♦ Conducted foundation suitability study, seismic evaluation, and fault trace study for resort development, Big Sur (Monterey Co.) ♦ Conducted analysis of debris-slide hazard potential of properties near Loma Mar (San Mateo Co.) ♦ Did technical analysis of slope stability and soil erosion potential of timber harvest operations, and evaluated surface-water monitoring practices (Humboldt Co.) for permitting dispute. ♦ Evaluated landslide activation hazard analysis of cliff side development in Brisbane (San Mateo Co.) ♦ Evaluated potential erosion hazards and drafted technical remedies from impacts of extrajudicial logging activities (Mendocino, Co.) ♦ Prepared engineering geologic reports for various residential development projects (Santa Cruz Co., San Mateo Co.).
- Groundwater Investigations, Modeling, and Remediation System Design: Designed and implemented original subsurface investigation technics, and remediation systems for a complex hydrogeologic environment of volcanic sediments, for Sierra Nevada Mt. community drinking water contamination (Volcano, CA). ◊ Did aquifer analysis and computer simulation (Modflow) of contaminant flow and remediation system design (groundwater extraction) for MTBE site in Turlock, CA. ◊ Did groundwater transport and pollutant fate analysis of landfill for litigation support. (Colma, CA)) ◊ Did ambient groundwater quality data analysis for Port of Stockton, CA.

- Groundwater Supply: Conducted groundwater use sustainability study for Sonoma Valley winery (Valley of the Moon). ◊ Did evaluation of sustainability potential and impacts from groundwater extraction in Sierra Valley (Sierra and Plumas Counties) for litigation support.
- Policy Review and Regional Studies: Conducted technical review and analysis of CA State water policy (State Implementation Plan, California Toxics Rule) for litigation support. ◊ Technical consultant and committee member for San Francisco Bay Copper-Nickel TMDL impairment studies (north and south). ◊ Conducted technical analysis of proposed monitoring and reporting programs for the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands within the Central Valley Region, providing testimony before the Before the Regional Board on behalf of stakeholders. ◊ Conducted technical analysis of rainfall distribution statistics and prepared comments on design storm standards for treatment control of BMP's in the California Statewide draft Industrial Storm Water Permit.
- Storm Water: Conducted technical reviews, and did litigation support in cases of storm water pollution regarding the adequacy of monitoring programs, BMPs, and treatment technology application (Alameda, Humboldt, Placer, Sacramento, San Joaquin, San Mateo, San Francisco, Sonoma, Yuba counties) for the following types of industry: aggregate, cement, asphalt, metal fabrication, metal forging, steel casting, recycling, ship breaking, wood treatment, sawmills, CAFOs, vehicle maintenance, auto wrecking, POTW, precious and heavy metal mines, landfills, fueling facilities, and port loading facilities for ammonia, fertilizer and petroleum coke.
- Mining Projects: Evaluated drinking water quality hazards posed to confined prisoners at an operating copper mine (United Nations ICTY, Bosnia-Herzegovina). ◊ Evaluated geochemical potential to produce acid and release arsenic from re-activated gold mine (Sutter Ck. CA), acid mine drainage water quality impacts. ◊ Evaluated WQ pollution potential from abandoned mercury and gold mines (Coastal Mts, central & north CA, Sierra Nev. Mts) for purposes of litigation.
- Land Discharge Projects: Evaluated compliance with CCR Title 23, Title 22, Chapter 15 (CA) regulations for Winery wastes (Amador County), dredging spoils disposal (Port of Stockton), Class III landfill (San Mateo Co., Shasta Co., Lake Co.). Designed monitoring programs and budgets.

#### March 1998 - January 1999

Fall Creek Engineering, Inc., Santa Cruz, CA, Principal Geologist

Evaluated the risk from surface and groundwater contamination to public groundwater supplies (Big Sur); performed computer simulations of flow and geochemistry of ground and surface water interaction using Modflow, Minteq. Did hydrologic studies to evaluate the flood stages, water surface profiles, and erosion potentials; constructed a computer-based hydraulic model of the river using HEC-RAS (Salinas River, Monterey Co.); prepared water quality and flood control management plans (Pajaro River). Designed and conducted soil and groundwater investigations: sampling analysis interpretation, various sites Monterey and Santa Cruz Counties (luft and wastewater systems).

### March 1997 - January 1998

Water For People, Denver Colorado, Consulting Hydrogeologist

Conducted a synoptic hydrogeological survey of the Bay Islands, Honduras, Central America for the Bay Island Environmental Project. Studied the islands' resources and made recommendations for a comprehensive water supply investigation of the three main islands comprised primarily of fractured metamorphic rock. Conducted local interviews, literature review and a reconnaissance level survey, field trued geology in selected areas. Evaluated island-available drilling technology, characterized water quality and supply issues for several of the island communities, prepared investigative criteria for future work, wrote report.

#### December 1986 - May 1998

California Regional Water Quality Control Board, Sacramento, CA. Associate Engineering Geologist Conducted investigations of all aspects of pollutant transport in the vadose zone and groundwater and surface water. Reviewed and evaluated the geologic, hydrogeologic, geochemical, and geophysical content of professional reports. Evaluated thoroughness of surface and groundwater investigations, the completeness of remedial efforts,

and validity of monitoring programs. Provided expert technical assistance to State and local agencies on issues of geochemical fate and transport of pollutants, well-head protection strategies, abandoned mine investigation and remediation methods, and contaminated groundwater and soil cleanup technics. Examples of such projects include the following:

- Analysis of groundwater impacts from organic solvents and fuels in sedimentary and fractured rock terrain.
   Evaluated investigative methods including drilling techniques, soil, water, and vapor sampling methods, and
   in situ and ex-situ remedial technologies using vapor transport, groundwater capture, extraction and treatment. Did deterministic computer modeling. Technical advisor and regulator for hundreds of facilities under
   authority of Federal and State underground tank statutes in the counties of Alpine, Amador, El Dorado, Ca laveras, Lake, Napa, Mariposa, Placer, Sierra, Solano, Stanislaus, and Tuolumne California, and in Yosemite
   National Park.
- Analysis of groundwater flow and pollutant transport characteristics of polluted, high density waste water (industrial acids and heavy-metals) at Davis, CA. Evaluated water quality impacts, effectiveness of groundwater extraction schemes using numerical modeling methodologies for flow, and chemical fate and transport. Co-developed in situ leaching methods of contaminated soils to accelerate cleanup rates.
- Analysis of the underlying, geochemical causes of acid mine drainage at the Penn Mine in Calaveras Co., CA. Identified and evaluated groundwater flow paths in a faulted crystalline-rock aquifer and the applicability of water quality and hazardous waste laws to the toxic discharges. Conducted a geologic and fracture mapping project and developed conceptual flow groundwater model. Evaluated acid-mine and acid-rock drainage remedial alternatives and made recommendations for their use. Developed and composed work plan for the investigation of fractured-rock hydrogeological transport, and aquatic geochemical fate of heavy metals from Penn Mine to the adjacent Camanche Reservoir. Authored numerous reports and a series of successful grant proposals, prepared annual budget and obtained funding for detailed groundwater and remedial waste rock investigations.
- In companion project to the above mine waste project, developed a conceptual model for the transport mechanisms of heavy-metal laden sediment in the Camanche water-supply reservoir, developed the conceptual methodology of investigation, and managed the project. Assembled a team of limnologists from the University of California at Davis and fluid mechanical engineers specializing in sediment re-suspension from University of California at Santa Barbara. Wrote a successful Federal Clean Lakes Grant proposal, and implemented the investigation at Camanche reservoir, California.

May 1986 - September 1986

U.S. Army Corps of Engineers, Sacramento, California, Engineering Geologist.

Conducted geologic and hydrogeologic investigations preparatory to the design of Deer Creek Water Supply Reservoir, Utah. Drafted groundwater investigation plan. Conducted geologic mapping. Designed monitoring wells, supervised drilling crews and well construction, conducted aquifer pump tests.

October 1983 - September 1984

Dames and Moore, Los Angeles, California, Sedimentary Petrologist.

Conducted sedimentological investigation of near-shore sediments in western Arabian Gulf. Characterized sediment transport systems in the Arabian Gulf area of United Arab Emirates for Abu Dabi National Oil Company.

May 1982 - April 1983

U.S. Army Corps of Engineers, Portland, Oregon, Engineering Geologist.

Conducted geologic, geophysical and hydrogeologic investigations in the Columbia Gorge near Bonneville, Oregon. Conducted geophysical borehole investigation of Bonneville New Navigation Lock. Did detailed mapping of landslides, and drill core logging. Designed passive de-watering systems, and monitoring wells. Supervised drilling crews and the construction of water supply wells and monitoring wells; conducted and interpreted aquifer pump tests.

June 1981 - December 1981

XCO, Denver Colorado, Petroleum Field Geologist (Mud logger)

Did drill core logging, conducted field screening of chemical composition of drill cores, interpreted geologic strata, and prepared drilling reports in several depositional basins in North Dakota, Colorado, and Oklahoma.

### Education & Training

Master of Science (ABT) in Hydrogeology, Special Studies Program, California State University, Chico, California, 1985-1986

Bachelor of Arts in Geology, Humboldt State University, California, 1979 - 1981

Annual NWWA courses in Aqueous Geochemistry, Fluid Flow through Fractured Rock, In situ Fluid Extraction Systems, Ground-Water Isotope Geochemistry. 1987-1991.

Computer Modeling. EPA CEAM: MINTEQ geochemical speciation, 1990, 1991; WASP surface water flow and transport, 1991. General Sciences Corp.: SESOIL vadose zone pollutant transport, 1994, 1996; AT 123D groundwater pollutant transport, 1994, 1996; NWWA: Visual Modflow, Flowtrans, groundwater flow and transport, 1996. WHI: Modflow 2000, MTD3, groundwater and contaminant transport, 2002.

Constructed Wetlands Workshop and Seminar Series, Humboldt State University, CA, 2002. Soil Slope Stabilization, Embankment Design, National Highway Institute, Vail, CO, 2007 40 hour OSHA Health and Safety for Hazardous Waste Operations and 8 hour refresher courses.

#### **Professional Associations**

Association of Engineering Geologists; Groundwater Resources Association of California Northern California MTBE and Fuel Oxygenates Committee

#### Nonprofit Affiliations

Valley Air Trust, Central Valley, Stockton California, Board Member 1993 - 1997
BayKeeper San Francisco Bay-Sacramento Delta, Technical Advisory Committee Member 1996 - present.
California Sportfishing Protection Alliance, Technical Advisory Committee Member 2000 - present
The Abandoned Mine Alliance, Sierra City, California, Board Member 2005 - present

#### **Expert Testimony**

- Before the United States Northern District of California Court, on issues of storm water pollutants associated with industrial ammonia and urea fertilizer production and storage operations in the case of California Sport Fishing Protection Alliance vs California Ammonia Company, September 2006.
- Before the United States Northern District of California Court, on issues of surface water pollution associated with logging practices in the case of EPIC vs Pacific Lumber Company, May 2006.
- Before the United States Northern District of California Court, on issues of groundwater and storm water pollution associated with lumber milling and wood treatment operations in the case of Ecological Rights Foundation vs Sierra Pacific Industries, April, October, 2002.
- Before the United States Eastern California District Court, on issues of storm water pollution, confined animal feeding operations and industrial activities in the case of WaterKeeper of Northern CA. vs L. Vandhoef, Chancellor, University of California, Davis, June, August 2001.
- Before the CA State Water Resources Control Board hearing on the Appeal of Regional Water Quality Board's Actions regarding Pacific Lumber and the Elk Creek Timber Harvest Monitoring, July 2001.
- Before the United States Northern District of California Court, on issues of storm water pollution and ship-breaking in the case of WaterKeepers of Northern CA. et al. vs U.S. Dept. of Navy and Astoria Metals Corporation, June, August 2000.

#### Expert Testimony cont.

- Before the California Superior Court on issues of groundwater pollution and crude oil in the case of Thompson Chevrolet vs Chevron Corporation et al., January, July, and November 1996.
- Before the California Superior Court on issues of acid mine drainage, water pollution, and groundwater flow through fractured crystalline rock in the case of California Sportfishing Protection Alliance vs State Water Resources Control Board, June 1994.
- Before the California Senate Natural Resource and Wildlife Committee Investigative Hearing on Conflicts of Interest in the California Environmental Regulatory System, June 1992.
- Before the California Senate Natural Resource and Wildlife Committee Investigative Hearing on Acid Mine Drainage, Water Pollution, and the California Regulatory Environment, Jan. 1992.
- Before the California State Water Resources Control Board hearing on the Appeal of Regional Water Quality Boards Actions regarding the Penn Mine, October 1991.

#### **Public Speaking and Presentations**

Presentations before the State Water Resources and Regional Water Quality Control Boards.

- Presented testimony and briefs before the State and Regional Boards on specific cases of regulatory enforcement actions, policy enactment, and permit adoptions (1990 2011)
- Mediator of formal discussions regarding disputed technical issues about groundwater quality between responsible parties, (1988 1998)

Workshop Presentations before professional societies, and local and State regulatory agencies:

- The application and interpretation of discreet groundwater sampling methods and data collection.
- The use and interpretation of computer modeling simulations for vadose transport and mineral equilibria
- The effects and determination of vertical gradients on pollutant transport in groundwater.
- Contaminated soil cleanup criteria based on California State Water Code, regulations and policies.
- Acid Mine Drainage issues: the geology, mineralogy, and chemistry, the environmental effects, remediation, policies, and politics.

#### Writings

Author of scores of reports for private organizations, NGO's, Federal, State and local Agencies, on the subjects of (a. organic and inorganic pollutant transport in surface and groundwaters, (b. polluted groundwater remediation, (c. the investigation and analysis of the potential transport of soil contamination (metals, fuels, solvents) through the vadose zone, (d. unsaturated zone characterization including vapor-phase transport and cleanup technologies, (e. acid mine drainage causes, fate, and mitigation, (f. the logical elements of water quality monitoring, (g. regulatory compliance of state and federal environmental laws by federal, state and private parties, (h. metal mobility and mineral equilibria, (i. net-vertical transport of groundwater pollutants, (j. general surface water and groundwater resource protection, (k. water budget accounting in mixed geologic environments with multiple density fluid interfaces, (l. groundwater supply evaluations, (m. reconciliation of threats to water resources and risks to human health, (n. engineering geology, geological hazard analysis, (o. rainfall distribution and design storm treatment objectives for storm water BMP's.

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### **SERVICE LIST**

Bob Perciasepe, Acting Administrator U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460

Eric Holder, U.S. Attorney General U.S. Department of Justice 950 Pennsylvania Avenue, N.W. Washington, DC 20530-0001

Jared Blumenfeld, Regional Administrator U.S. EPA – Region 9 75 Hawthorne Street San Francisco, CA, 94105

Thomas Howard, Executive Director State Water Resources Control Board P.O. Box 100 Sacramento, CA 95812-0100

Robert E. Perdue, Executive Officer California Regional Water Quality Control Board, Colorado River 73-720 Fred Waring Drive, Suite 100 Palm Desert, CA 92260

Charlton H. Bonham, Director California Department of Fish & Wildlife 1416 Ninth Street, 12th Floor Sacramento, CA 95814

Kimberly Nicol, Regional Manager California Department of Fish & Wildlife Inland Deserts Region 3602 Inland Empire Boulevard, Suite C-220 Ontario, CA 91764